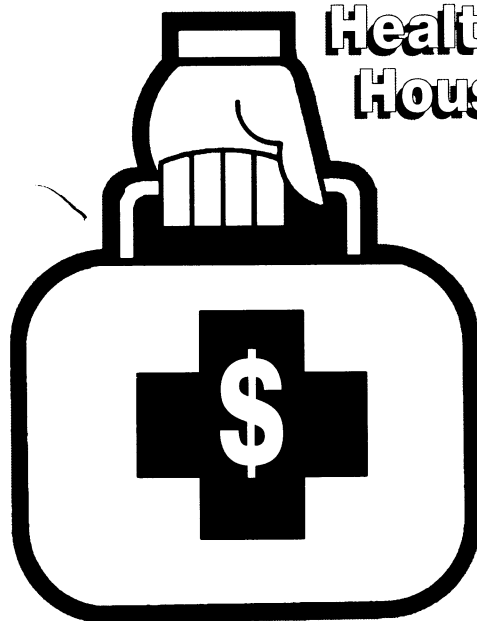




CURRENT POPULATION REPORTS  
**Household Economic Studies**

P70-35

# **Monitoring the Economic Health of American Households**



Average Monthly  
Estimates of Income,  
Labor Force Activity,  
Program Participation,  
and Health Insurance

**First Quarter 1984  
to Third Quarter 1991**

## **SIIPP**

Survey of Income and Program Participation

by Paul Ryscavage

U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

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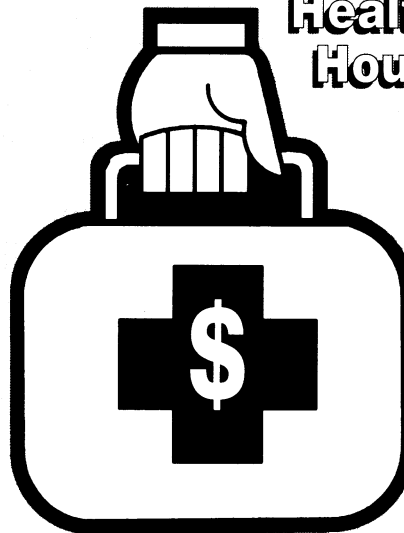
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**U.S. Department of Commerce**  
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# Monitoring the Economic Health of American Households

## A Note to Users

All demographic surveys, including SIPP, are affected by undercoverage of the population. This undercoverage results from missed housing units and missed persons with sample households. Compared to the level of the 1980 decennial census, overall undercoverage is about 7 percent. Undercoverage varies with age, sex, and race. For some groups, such as 20 to 24 year old Black males, the undercoverage is as high as about 35 percent. The weighting procedures used by the Census Bureau partially correct for the bias due to undercoverage. However, its final impact on estimates is unknown. For details, see appendix C.

## INTRODUCTION

Since 1983 the Census Bureau has been collecting information on the incomes and other economic, social, and demographic characteristics of our Nation's households on a subannual basis in its Survey of Income and Program Participation (SIPP). The statistics from this survey have provided policy makers, researchers, and the general public with new and important insights into specific aspects of the economic well-being of Americans. For example, they have been used to better understand the relationship between poverty and participation in Federal government transfer programs, to identify individuals receiving benefits from multiple income transfer programs, and to learn more about those persons not covered by health insurance.<sup>1</sup>

The SIPP, however, can also be used to monitor the general economic well-being of households across fairly long periods of time. This is because the SIPP is an ongoing and recurring survey of the same individuals over time and, unlike other surveys, the information collected relates to a much wider range of activities which people engage in that ultimately determine their economic well-being.

Up until the development of SIPP, most Federal government statistical surveys have been subject specific. That is, they focused on aspects of the economic well-being of our population: health, employment and unemployment, housing, jobs, and so on. Policy makers who attempted to assess how well society was faring economically had to assemble data from a variety of sources before making judgements and reaching decisions. While the data collected in the SIPP do not

represent all of the activities which determine economic well-being, the data do reflect the activities of individuals in relation to two important sources of economic well-being in contemporary America—the labor market and the Federal government.

In the last quarter of the 20th century, economic life in this country, as in all major industrialized countries, has become considerably more complex. One way it has become more complex is with respect to our relationship to the job market and to the Federal government. Economic well-being today does not simply depend on whether one has a job or not, for example, but whether it pays well and what kind of benefits are provided, such as health insurance. It also can depend on the availability of social welfare programs—the “social welfare net”—and their beneficence in times of unemployment, illness, and old age. For many American households today, economic well-being depends on this interrelationship between the labor market and their Federal, State, and local governments, or more broadly speaking, the private and the public sectors of society.

The following report contains subannual data relating to the economic well-being of households, families, and persons during most of the 1980s and early 1990s. Specifically, average monthly estimates are presented for

- the incomes of households,
- the labor force activity of persons,
- the Federal government program participation of individuals and households,
- and the health insurance coverage of the population,

during the period from the first quarter of 1984 to the third quarter of 1991. (Also included in this report are data for the period from the fourth quarter of 1991 to the third quarter of 1992. These data, however, are not analyzed as they only became available after the main body of this report was completed.)

<sup>1</sup>Other descriptive reports have also related to various aspects of the economic well-being of persons, families, and households, for example, household wealth and asset ownership, transitions into and out of poverty, spells of job search, and disability.

During this period the Nation's economy was in two different stages of the business cycle. Economic expansion characterized most of the 1980s, specifically from November 1982 to July 1990; economic contraction characterized the 1990 to 1991 period, specifically from July 1990 to March 1991.<sup>2</sup> SIPP's unique capability, therefore, is to monitor how households fared during these periods of economic expansion and contraction and to observe the relationship between the private and public sectors as sources of economic well-being.<sup>3</sup>

## HIGHLIGHTS

(The figures in parentheses denote 90-percent confidence intervals.)

- The real median monthly income (in third quarter, 1991 dollars) of nonfarm households rose from \$2,313 ( $\pm 35$ ) in the third quarter of 1984 to \$2,485 ( $\pm 32$ ) by the third quarter of 1988, an increase of 7.4 ( $\pm 2.1$ ), percent and then declined to \$2,376 ( $\pm 26$ ) in the third quarter of 1991, or by 4.4 ( $\pm 1.6$ ) percent.
- The number of nonfarm households with monthly incomes that would have been considered below the official poverty level fell from 11.7 ( $\pm 0.4$ ) million in the first quarter of 1984 to 10.8 ( $\pm 0.4$ ) million by the first quarter of 1989. By the first quarter of 1991—in the middle of the recession—the poverty population had increased to 11.9 ( $\pm 0.3$ ) million households.
- Between the third quarters of 1984 and 1989, the number of persons with jobs rose from 105.7 ( $\pm 0.8$ ) to 118.2 ( $\pm 0.7$ ) million; with the onset of the recession, job growth came to an end between the third quarters of 1989 and 1991.
- Throughout the period under investigation, between 43.0 ( $\pm 0.6$ ) and 47.7 ( $\pm 0.5$ ) percent of all nonfarm households in the country received some form of cash or noncash payment from a government program.
- Between the third quarters of 1989 and 1991, the number of nonfarm households participating in the food stamp program increased from 5.8 ( $\pm 0.3$ ) million to 6.8 ( $\pm 0.3$ ) million; the number of households with someone receiving Medicaid increased from 8.4 ( $\pm 0.3$ ) million to 10.0 ( $\pm 0.3$ ) million; and the number of households with someone receiving unemployment compensation grew from 1.4 ( $\pm 0.1$ ) million to 2.7 ( $\pm 0.2$ ) million households.
- Reflecting the downturn in economic activity in the early 1990s, the number of persons with some labor force activity during the month who lived in nonfarm households in which food stamps were received increased from 4.0 ( $\pm 0.4$ ) million to 5.1 ( $\pm 0.3$ ) million between the third quarters of 1989 and 1991.
- The changing economic conditions between the late 1980s and early 1990s had an impact on how some Americans received their health insurance coverage. The proportion of all persons receiving health insurance coverage through an employer declined from 62.8 ( $\pm 0.6$ ) percent to 60.5 ( $\pm 0.5$ ) percent between the third quarters of 1989 and 1991, while the proportion covered by Medicaid increased from 7.3 ( $\pm 0.3$ ) to 8.9 ( $\pm 0.3$ ) percent.

## CROSS-SECTIONAL DATA FROM SIPP: BACKGROUND

The SIPP is a panel survey that collects information from the same individuals over a period of time. It provides statistics about these persons as of a point-in-time—cross-sectional estimates—as well as across or over time—longitudinal estimates. In other words, the SIPP can not only tell us what was the median income of persons in the fourth quarter of 1993, for example, but also which persons' incomes increased, decreased, or stayed the same between the third and fourth quarters of 1993.

In a typical SIPP panel, sample members in approximately 20,000 households around the country are interviewed at 4-month intervals over a period of 32 months. Since 1984, a new SIPP panel has been put into the field every year.<sup>4</sup> Because these panels overlap one another it is possible to combine estimates from different panels for the same point in time thereby creating “combined” cross-sectional estimates.<sup>5</sup> (See appendix A for more details on SIPP's design.)

<sup>4</sup>Because of budgetary constraints, midway through the 1984 SIPP panel, the sample of 21,000 households initially eligible for interviewing was reduced by almost 20 percent. Sample sizes for panels fielded in 1985 through 1989 were also smaller than originally planned because of funding difficulties and these samples ranged in size from 12,500 to 14,500 households. In addition, the 1986 and 1987 panels were limited to seven interviews, while the 1988 and 1989 panels, were limited to six and three interviews, respectively. The reason for shortening the 1988 and 1989 SIPP panels was to free up funds to restore the 1990 panel to 23,600 eligible households. Funding for the 1992 panel and 1993 panels appears to be sufficient to maintain the sample at its original size, 20,000 households (the 1991 panel contained 14,000 households).

<sup>5</sup>The SIPP sample design and questionnaire design are currently undergoing a revision. This revision will be implemented beginning with the 1996 panel. The sample size will be increased to 50,000 households and each panel will last for approximately 4 years. Overlapping panels will no longer be a feature of the basic design; new panels will only be introduced after an old panel has been completed.

<sup>2</sup>Turning points of the business cycle (peaks and troughs) are identified by the National Bureau of Economic Research.

<sup>3</sup>In the early 1990s, the Census Bureau asked the Committee on National Statistics of the National Academy of Sciences to convene a panel of experts to make a review of the SIPP—its goals, its sample design, its data products, and so on—for the purposes of helping the Bureau enhance the utility and cost effectiveness of the SIPP. This resulted in the report, *The Future of the Survey of Income and Program Participation*, National Research Council, (Washington, DC: National Academy Press), 1993.

For the most part, this report is based on combined cross-sectional data from SIPP panels (the detailed tables contain data from single panels). The data are referred to as average monthly estimates for calendar year quarters.<sup>6</sup> They represent the simple average of three monthly observations of data. The compilation of the data into monthly averages for quarters represents only one of a number of approaches to presenting cross-sectional estimates. Indeed, any periodicity involving months could be used as the metric of analysis. This is because the SIPP's design relies heavily on the collection of most data items on a monthly basis. (More details concerning the procedures for creating combined panel estimates can be found in appendix C.)

Users of the average monthly estimates contained in this report should be aware of two characteristics of these specific data and their quality. First, the estimates presented exclude the farm population (except in the case of the health insurance estimates where they are included). This restriction was originally made in the Census Bureau's internal tabulations of the SIPP data because of concern over the quality of farm self-employment income data. Estimates for the total population, of course, can be derived from the public use data files. Second, the average monthly estimates for calendar year quarters have not been seasonally adjusted. As is well known, many statistical series reflecting economic activity, such as employment, display well-known seasonal movements. For other series, however, seasonal patterns are less well-known. Regardless, changes in estimates for consecutive quarters may contain a seasonal component as well as cyclical, secular, and irregular components. Over-the-year comparisons of estimates of the same quarters, of course, circumvent this problem and, therefore, are used in this report.

## WHAT THE DATA TELL US: A DESCRIPTIVE ANALYSIS

During the time period covered by this report—the first quarter of 1984 to the third quarter of 1991—the health of the Nation's economy experienced some rather dramatic changes. Initially, the economy expanded rapidly as recovery from the recessions of the early 1980s got underway and sustained economic growth set in. Real gross domestic product (in 1987 dollars) rose 23.8 percent from \$3,906.6 billion in 1983 to \$4,838.0 billion by 1989; approximately 17.7 million nonfarm payroll jobs were created and the Nation's

unemployment rate fell from 9.5 percent to 5.2 percent; and real median family incomes (in 1992 dollars) rose 11.4 percent from \$34,757 in 1983 to \$38,710 in 1989.<sup>7</sup>

These economic indicators, of course, changed direction with the onset of the economic recession in mid-1990. Real gross domestic product began to fall, job growth stalled, unemployment began to increase, and incomes across the land plunged. Although by the second-half of 1991 the economy stopped contracting, the following recovery was lackluster.

The SIPP data for households and persons presented below, in many respects, reflect the changes in the health of the Nation's economy over this period. It should be remembered, however, that many of the estimates of specific characteristics, such as, household income, employment, and participation in certain government programs, can differ from those obtained from other surveys and sources.

## Income

One of the primary reasons for the development of the SIPP was to improve information on the income distribution and economic well being of the population. Prior to the SIPP, the major source of this kind of data was the annual income supplement to the March Current Population Survey (CPS). In many respects, the quality of the SIPP income data surpasses that of the CPS, though problems such as nonresponse and measurement error remain.<sup>8</sup> Nevertheless, the estimates of average monthly household income and poverty derived from the SIPP parallel, in many instances, the annual estimates of similar economic indicators obtained from the March CPS over the 1984 to 1991 period.

Figure 1 and table A show the estimates of the median monthly household income for each quarter between the first quarter of 1984 and third quarter of

<sup>6</sup>One of the first data products released by the Census Bureau in September 1984 was based on average monthly data (exclusively from the 1984 panel) for a calendar year quarter. The report was entitled, *Economic Characteristics of Households in the United States: Third Quarter 1983*, Current Population Reports, Household Economic Studies, Series P-70, No. 1. This report contained data on income, program participation, and labor force activity. Similar quarterly reports were released covering calendar year quarters through the fourth quarter of 1984, after which time this series of reports was canceled due to delays in timely release of the data.

<sup>7</sup>Gross domestic product estimates were obtained from the National Income and Product Accounts of the Department of Commerce (*Survey of Current Business*, September, 1993, p. 50); estimates of nonfarm payroll employment and unemployment were obtained from the Bureau of Labor Statistics' establishment survey and monthly Current Population Survey (CPS) (*Employment and Earnings*, July, 1993, pp. 81 and 9, respectively); and estimates of median family income were obtained from the Census Bureau's income supplement to the March CPS (*Money Income of Households, Families, and Persons in the United States: 1992*, Series P-60-184, p. B-10). It should be noted, however, that other significant economic developments of a less sanguine nature occurred during the 1980s. For example, household and family incomes became more dispersed indicating that not everyone was sharing in the economic prosperity; furthermore, the poverty rate remained stubbornly high and the average wage level (in real terms) for men changed very little.

<sup>8</sup>For a general discussion of these problems, see Thomas B. Jabine, Karen F. King, and Rita J. Petroni, *SIPP Quality Profile*, Bureau of the Census, May 1990, pp. 145-146. For a more specific discussion of the quality of the income data from the SIPP, see Denton R. Vaughn, "Reflections on the Income Estimates from the Initial Panel of the Survey of Income and Program Participation," in *Individuals and Families in Transition: Understanding Change Through Longitudinal Data*, U.S. Department of Commerce, Bureau of the Census, March 1988, pp. 333-413. The Census Bureau is currently updating this evaluation with an analysis of the income data from the SIPP 1990 panel.

1991 from the various SIPP panels. These estimates have been adjusted for inflation using the Consumer Price Index (CPI-U) of the Bureau of Labor Statistics (BLS) and are expressed in terms of third quarter 1991 dollars. As shown there, the individual estimates from these panels do, in a general way, sketch out a discernible trend. The estimates from the panels tend to rise during most of the 1980s and then begin to fall in the 1990s.<sup>9</sup>

When estimates from the same quarters, but from different panels, are combined, a subannual trend in the real median monthly household incomes can be constructed, which is seen in figure 2 and table A. Between the third quarters of 1984 (a single panel estimate) and 1988, the median increased from \$2,313 to \$2,485; by the third quarter of 1991, however, the median had fallen back to \$2,376.

One of the important uses of subannual income information is in the area of poverty research. Although the Federal government's official poverty measure is based on annual income, it has long been unclear as to what the appropriate accounting period for poverty should be.<sup>10</sup> Some researchers have shown that subannual variations in income are quite common and that severe economic hardships can occur for periods of much less than a year. Indeed, the SIPP data from the 1984 panel have been used to show that 26 percent of the population experienced 1 month below the poverty line in a year, but only about 6 percent were poor in every single month of the year.<sup>11</sup>

Table B shows panel estimates of the number of all households that would be considered poor if the official poverty thresholds used to calculate the annual poverty estimates were adjusted to a monthly basis.<sup>12</sup> One characteristic of these data is that in all the panels, the first quarterly estimate of poverty is typically higher than the subsequent second quarter estimate.

The combined panel estimates of low income households for this period shown in figure 3 and table B

<sup>9</sup>This pattern is similar to that recorded by the CPS. Between 1984 and 1989, the median annual household income (in 1992 dollars) according to the CPS rose from \$30,268 to \$32,706 and then dropped to \$31,033 by 1991.

<sup>10</sup>An annual accounting period is used in the official definition because the source of the income data is from the March CPS which is an "annual" cross-sectional survey of households. See Patricia Ruggles, *Drawing the Line*, (Washington, D.C.: The Urban Institute), 1990, pp. 89-95.

<sup>11</sup>See Patricia Ruggles and Robertson Williams, "Transitions In and Out of Poverty: New Data from the Survey of Income and Program Participation," SIPP Working Paper No. 8716, (Washington, D.C.: U.S. Bureau of the Census), 1987.

<sup>12</sup>The poverty thresholds of the official definition are derived on the basis of the age of the householder (age 65 and over or under 65 years) when the family unit has less than three persons, the size of the family unit (1 to 9 persons), and the presence of related children under 18 years of age (none to 8 or more). In creating "monthly household" poverty thresholds, households are regarded as families and the respective annual thresholds are adjusted for each month of the calendar year. Monthly poverty thresholds are indexed to the Bureau of Labor Statistics' Consumer Price Index.

indicate a certain amount of cyclical responsiveness. If estimates for the first quarters of 1984 (a single panel estimate), 1989, and 1991 are used to measure business cycle changes, it is found that the number of households with low incomes fell from 11.7 million in 1984 to 10.8 million in 1989, and then increased to 11.9 million as 1991 began.<sup>13</sup>

Among the many other income measures derivable from the SIPP panels are measures of labor income. While subannual data on hourly wages and weekly earnings are readily available from other Federal government surveys, the SIPP earnings data can be related to a variety of other data relating to the economic well-being of a household, such as program participation.

Figure 4 and table C show the median earnings of men and women who worked full time for all weeks of the month and the female-male earnings ratio. As indicated there, the median real earnings of men declined over this period from \$2,217 a month in the third quarter of 1984 (a single panel estimate) to \$2,166 by the third quarter of 1991, while those for women increased from \$1,439 to \$1,538. As a result, the female-male earnings ratio rose from 0.649 to 0.710.<sup>14</sup>

## Labor Force

The Federal government's official labor force statistics are reported each month in great detail by the Bureau of Labor Statistics (BLS). They are collected in the monthly CPS, the oldest continuous household survey in the country. Consequently, the labor force information collected in the SIPP are used primarily to supplement and explain the income and program participation data.

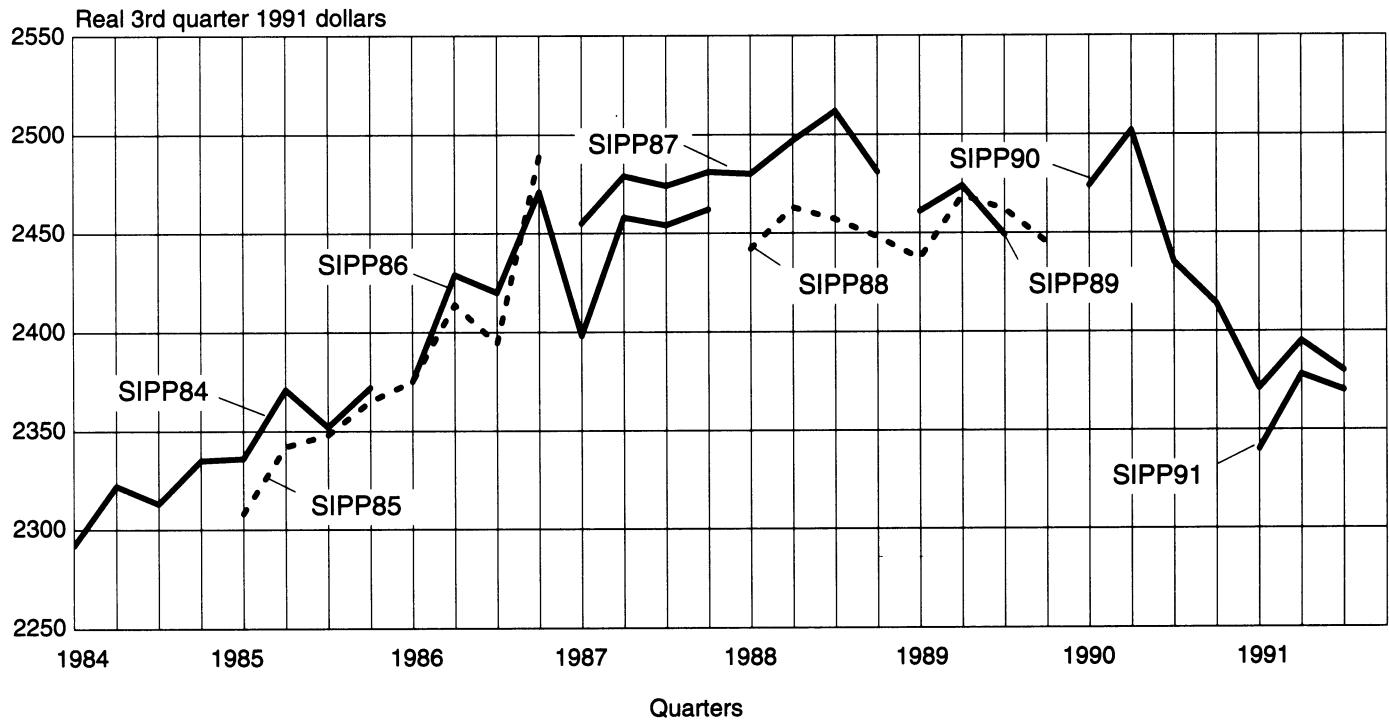
Conceptually, the labor force data collected in both surveys are similar, although many specific differences exist between the data from the two surveys.<sup>15</sup> In the SIPP, persons "with jobs" and persons who "looked for work or were on layoff" during the month are the counterparts to persons who were "employed" and "unemployed" in the previous week in the CPS.

<sup>13</sup>In a general sense, this trend is similar to the trend in the number of families and unrelated individuals below the poverty level according to the CPS. In 1984 13.9 million families and unrelated individuals were officially identified as being poor and by 1989 the number had fallen to 13.5 million. By 1991, however, families and unrelated individuals with incomes below the official poverty level had increased to 15.5 million.

<sup>14</sup>Usual weekly earnings data from the monthly CPS for men and women working full time (35 hours a week or more) over this period sketch out a similar trend. According to the CPS data, the female-male pay ratio rose from 0.645 to 0.741 between 1984 and 1991.

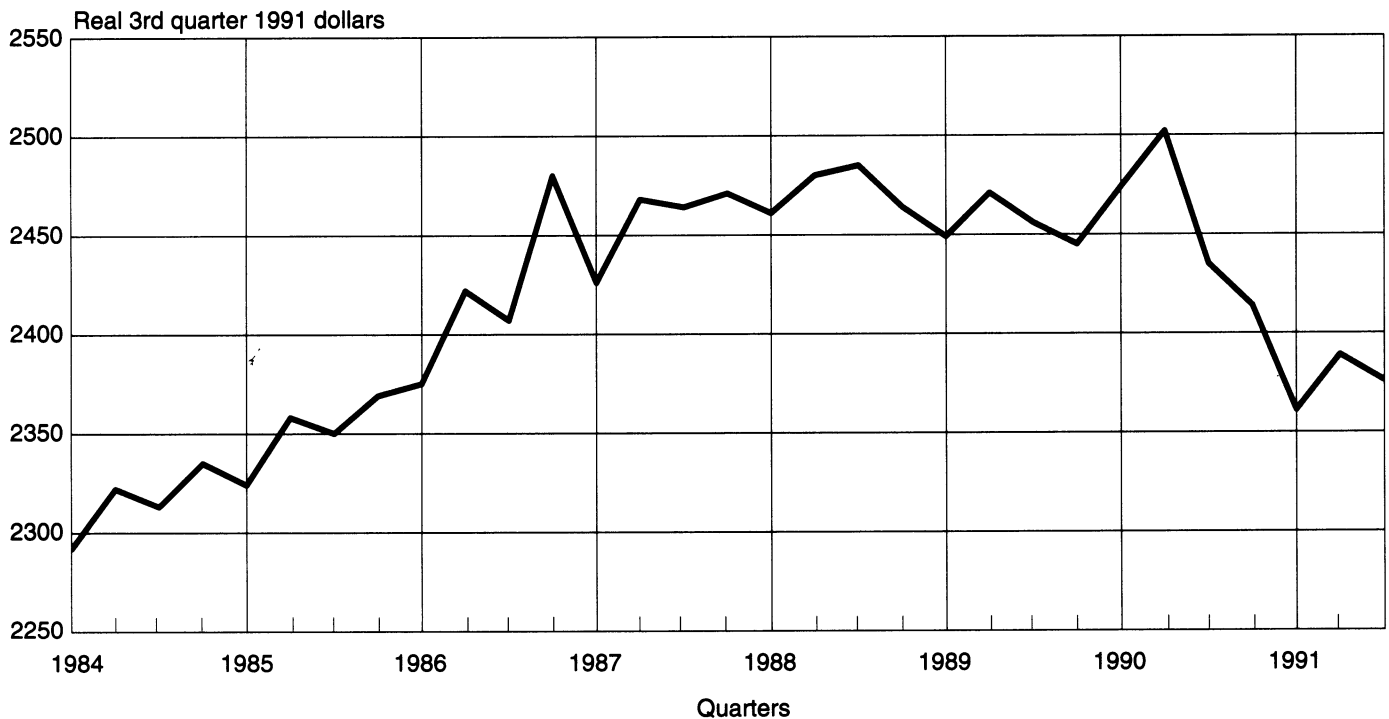
<sup>15</sup>For a discussion of the conceptual and methodological differences between the labor force estimates from the SIPP and the monthly Current Population Survey (CPS), see Paul M. Ryscavage and John E. Bregger, "New Household Survey and the CPS: A Look at the Labor Force Differences," *Monthly Labor Review*, September 1985, pp. 3-12.

Figure 1.  
**Real Median Monthly Household Income From SIPP Panels:**  
**First Quarter 1984 to Third Quarter 1991**



Note: Normal incomes were deflated by the CPI.

Figure 2.  
**Real Median Monthly Household Income From Combined SIPP Panels:**  
**First Quarter 1984 to Third Quarter 1991**



Note: Normal incomes were deflated by the CPI.

**Table A. Average Monthly Estimates of Real Median Monthly Household Income From SIPP Panels and Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In third quarter 1991 dollars)

Year and quarter	1984 panel	1985 panel	1986 panel	1987 panel	1988 panel	1989 panel	1990 panel	1991 panel	Com- bined panels	Standard errors
<b>1984</b>										
1st quarter .....	2,292								*2,292	*21
2nd quarter .....	2,322								*2,322	*23
3rd quarter .....	2,313								*2,313	*22
4th quarter .....	2,335								*2,335	*23
<b>1985</b>										
1st quarter .....	2,336	2,308							2,324	26
2nd quarter .....	2,371	2,342							2,358	27
3rd quarter .....	2,352	2,348							2,350	28
4th quarter .....	2,372	2,365							2,369	29
<b>1986</b>										
1st quarter .....		2,375	2,375						2,375	31
2nd quarter .....		2,414	2,429						2,422	31
3rd quarter .....		2,394	2,420						2,407	32
4th quarter .....		2,489	2,471						2,480	30
<b>1987</b>										
1st quarter .....			2,398	2,455					2,426	31
2nd quarter .....			2,458	2,479					2,468	23
3rd quarter .....			2,454	2,474					2,464	24
4th quarter .....			2,462	2,481					2,471	26
<b>1988</b>										
1st quarter .....				2,480	2,442				2,461	26
2nd quarter .....				2,497	2,463				2,480	27
3rd quarter .....				2,512	2,457				2,485	27
4th quarter .....				2,481	2,448				2,464	27
<b>1989</b>										
1st quarter .....					2,437	2,461			2,449	26
2nd quarter .....					2,469	2,474			2,471	28
3rd quarter .....					2,462	2,449			2,456	28
4th quarter .....					2,445				*2,445	*28
<b>1990</b>										
1st quarter .....							2,474		*2,474	*22
2nd quarter .....							2,502		*2,502	*23
3rd quarter .....							2,435		*2,435	*22
4th quarter .....							2,414		*2,414	*22
<b>1991</b>										
1st quarter .....							2,371	2,344	2,361	24
2nd quarter .....							2,395	2,378	2,389	25
3rd quarter .....							2,380	2,370	2,376	25

\* Single panel estimates only.

Figure 3.  
Households With Low Monthly Incomes From Combined SIPP Panels:  
First Quarter 1984 to Third Quarter 1991

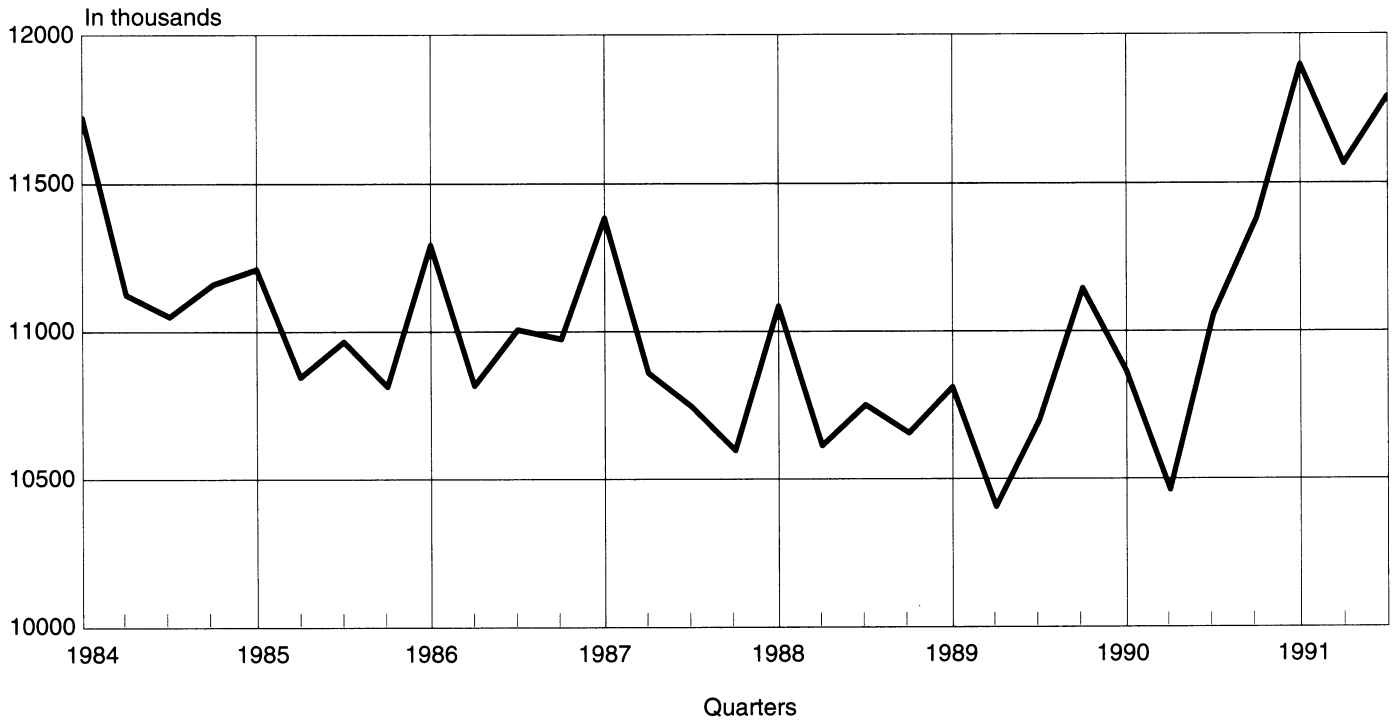
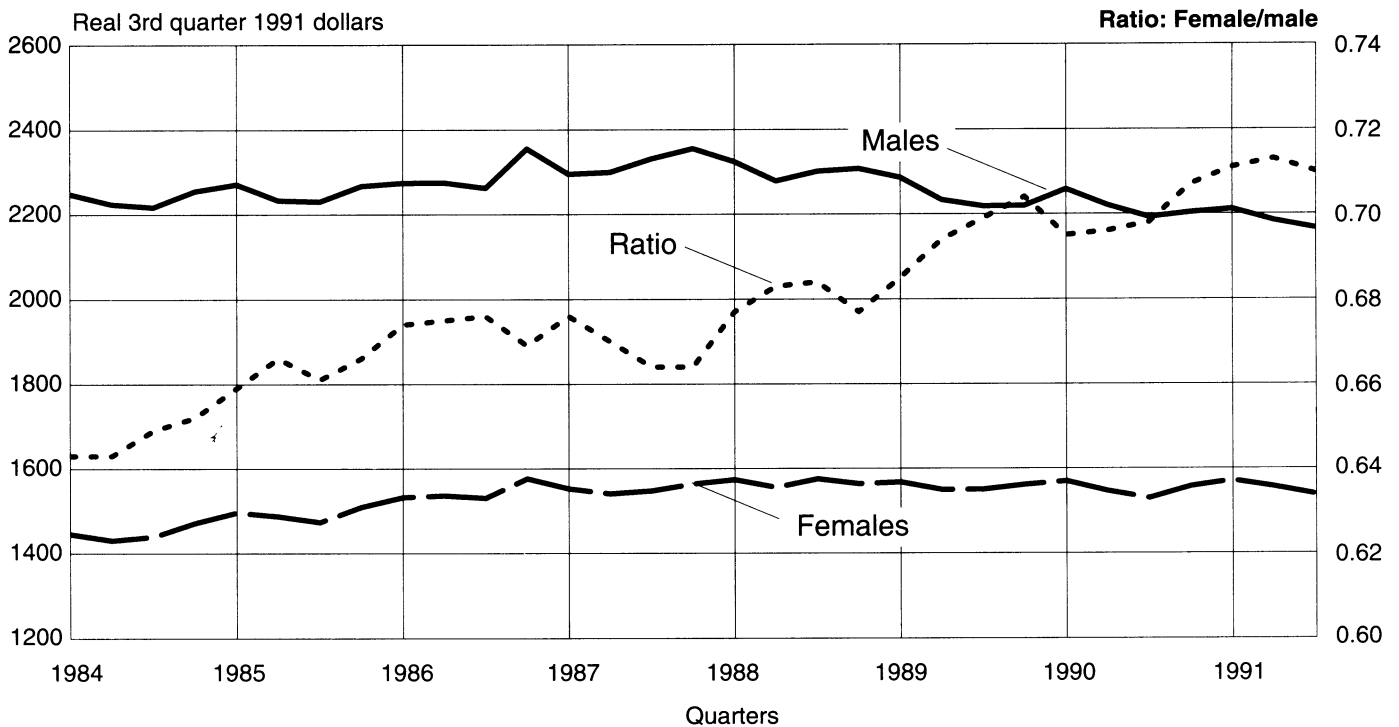


Figure 4.  
Real Median Monthly Earnings of Males and Females From Combined  
SIPP Panels: First Quarter 1984 to Third Quarter 1991



Note: Persons who worked full time in all weeks of the month.

**Table B. Average Monthly Estimates of Households With Low Income From SIPP Panels and Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

Year and quarter	1984 panel	1985 panel	1986 panel	1987 panel	1988 panel	1989 panel	1990 panel	1991 panel	Combined panels
<b>1984</b>									
1st quarter .....	11,722								*11,722
2nd quarter .....	11,124								*11,124
3rd quarter .....	11,050								*11,050
4th quarter .....	11,160								*11,160
<b>1985</b>									
1st quarter .....	10,922	11,585							11,210
2nd quarter .....	10,783	10,929							10,846
3rd quarter .....	10,872	11,088							10,966
4th quarter .....	10,688	10,978							10,814
<b>1986</b>									
1st quarter .....		10,890	11,711						11,292
2nd quarter .....		10,463	11,185						10,817
3rd quarter .....		10,873	11,144						11,006
4th quarter .....		10,872	11,081						10,974
<b>1987</b>									
1st quarter .....			11,471	11,291					11,383
2nd quarter .....			11,022	10,691					10,860
3rd quarter .....			10,839	10,648					10,745
4th quarter .....			10,634	10,558					10,597
<b>1988</b>									
1st quarter .....				10,630	11,547				11,085
2nd quarter .....				10,212	11,020				10,613
3rd quarter .....				10,354	11,154				10,751
4th quarter .....				10,461	10,855				10,656
<b>1989</b>									
1st quarter .....					10,677	10,949			10,811
2nd quarter .....					10,548	10,256			10,405
3rd quarter .....					10,858	10,538			10,700
4th quarter .....					11,144				*11,144
<b>1990</b>									
1st quarter .....							10,864		*10,864
2nd quarter .....							10,462		*10,462
3rd quarter .....							11,055		*11,055
4th quarter .....							11,381		*11,381
<b>1991</b>									
1st quarter .....							11,548	12,453	11,898
2nd quarter .....							11,367	11,876	11,564
3rd quarter .....							11,555	12,162	11,790

\* Single panel estimates only.

**Table C. Average Monthly Estimates of Real Median Earnings for Males and Females Who Worked Full Time in All Weeks of the Month—Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In third quarter 1991 dollars)

Year and quarter	Males		Females		Female/male ratio
	Median	Standard error	Median	Standard error	
<b>1984</b>					
1st quarter* . . .	2,248	17	1,445	13	0.643
2nd quarter* . . .	2,224	17	1,430	13	0.643
3rd quarter* . . .	2,217	17	1,439	13	0.649
4th quarter* . . .	2,255	18	1,471	14	0.652
<b>1985</b>					
1st quarter . . . .	2,271	22	1,496	19	0.659
2nd quarter . . . .	2,233	21	1,487	18	0.666
3rd quarter . . . .	2,230	21	1,473	18	0.661
4th quarter . . . .	2,267	22	1,509	14	0.666
<b>1986</b>					
1st quarter . . . .	2,274	25	1,532	13	0.674
2nd quarter . . . .	2,275	24	1,536	13	0.675
3rd quarter . . . .	2,262	24	1,530	13	0.676
4th quarter . . . .	2,355	27	1,576	15	0.669
<b>1987</b>					
1st quarter . . . .	2,295	27	1,552	15	0.676
2nd quarter . . . .	2,299	29	1,540	15	0.670
3rd quarter . . . .	2,331	29	1,547	16	0.664
4th quarter . . . .	2,355	26	1,563	15	0.664
<b>1988</b>					
1st quarter . . . .	2,324	27	1,573	17	0.677
2nd quarter . . . .	2,278	28	1,555	16	0.683
3rd quarter . . . .	2,301	21	1,575	17	0.684
4th quarter . . . .	2,307	18	1,563	18	0.677
<b>1989</b>					
1st quarter . . . .	2,286	19	1,567	18	0.685
2nd quarter . . . .	2,233	18	1,549	17	0.694
3rd quarter . . . .	2,218	18	1,550	18	0.699
4th quarter* . . .	2,219	18	1,561	20	0.704
<b>1990</b>					
1st quarter* . . .	2,258	14	1,569	14	0.695
2nd quarter* . . .	2,220	14	1,546	14	0.696
3rd quarter* . . .	2,192	14	1,529	14	0.698
4th quarter* . . .	2,203	14	1,557	11	0.707
<b>1991</b>					
1st quarter . . . .	2,211	20	1,571	12	0.711
2nd quarter . . . .	2,184	19	1,556	13	0.713
3rd quarter . . . .	2,166	19	1,538	13	0.710

\* Single panels estimates only.

Figures 5, 6, and table D present combined panel estimates from the SIPP on persons with jobs at some time during the month and persons who looked for work or were on layoff at some time during the month. (It is important to remember these groups overlap to some extent because it is possible in the course of a month for an individual to both have a job and have looked for a job or been on layoff.) The SIPP data show that between the third quarters of 1984 (a single panel estimate) and 1989, the number of persons with jobs increased by

12.5 million. With the onset of the recession, persons with jobs declined by 884,000 between the third quarters of 1989 and 1991 but this change was not statistically significant.<sup>16</sup>

As with the employment data from the CPS, the SIPP data reflect, to some extent, a seasonal pattern. For example, between the first and third quarters of each year, employment rose sharply. In 1984 the increase amounted to 3.5 million persons and in 1988 it was 3.0 million. While some of these net changes reflect a cyclical increase in employment, another part no doubt reflects seasonal increases from the winter to the summer months.

The SIPP data on looking for work and layoff also reflect the changing economic conditions the Nation underwent in recent years. Between the third quarters of 1984 (a single panel estimate) and 1989 the number of persons who spent some time in the month looking for work or on layoff fell from 10.2 million to 6.5 million. By the third quarter of 1991, however, the level had risen back up to 8.9 million, or an increase of 2.5 million persons.<sup>17</sup>

One advantage that the subannual labor force information from SIPP has is that it can be linked to other pieces of data collected in the survey that have a bearing on economic well being. For example, the SIPP collects data which enables researchers to explore the relationship between work and transfer programs. It is well-known that the number of households receiving benefits from the food stamp program increased in recent years as economic growth faltered in the early 1990s. Figure 7 and table E show the number of persons with labor force activity who lived in households in which food stamps had been received over the third quarters of 1984 (a single panel estimate) to 1991. Two points stand out: first, as a proportion of all labor force participants, those who live in "food stamp" households represent a very small proportion of all households; and second, between the third quarters of 1989 and 1991 the number of persons with some labor force activity during the month living in a household in which food stamps were received rose by 1.1 million, with 678,000 of the increase occurring among persons who had a job during the entire month (these two differences, however, were not significantly different from one another.<sup>18</sup>

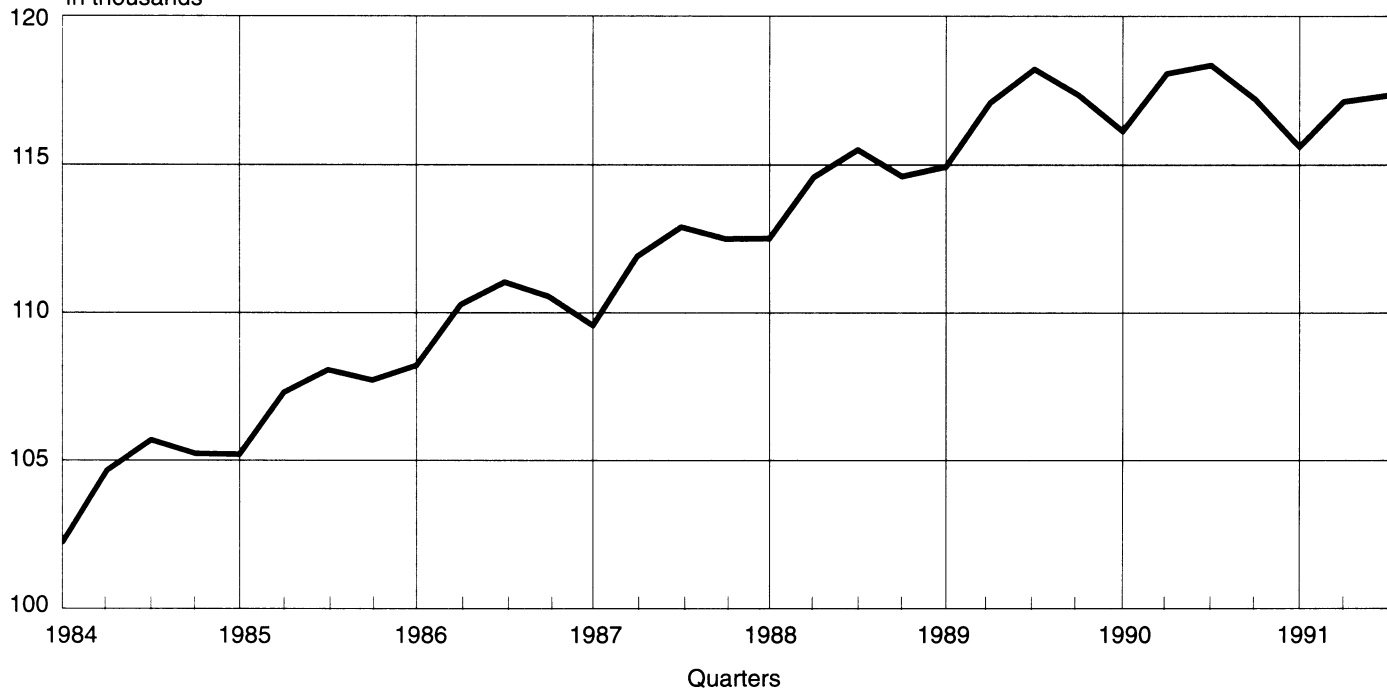
<sup>16</sup>The CPS count of employed workers rose from 106.7 million to 118.7 million, or 12.0 million between the third quarters of 1984 and 1989. Between the third quarters of 1989 and 1991, employment fell by 700,000.

<sup>17</sup>The CPS count of unemployed workers fell from 8.4 million to 6.5 million, or 1.9 million, between the third quarters of 1984 and 1989. Between the third quarters of 1989 and 1991, unemployment rose by 1.8 million.

<sup>18</sup>Beginning in 1985 food stamp eligibility standards were liberalized by easing limits on assets. At the same time, employment and training program requirements for adult applicants were enacted. Legislative changes expanding eligibility and benefits continued into 1988 and 1989.

Figure 5.  
**Persons With Jobs During Month From Combined SIPP Panels:  
 First Quarter 1984 to Third Quarter 1991**

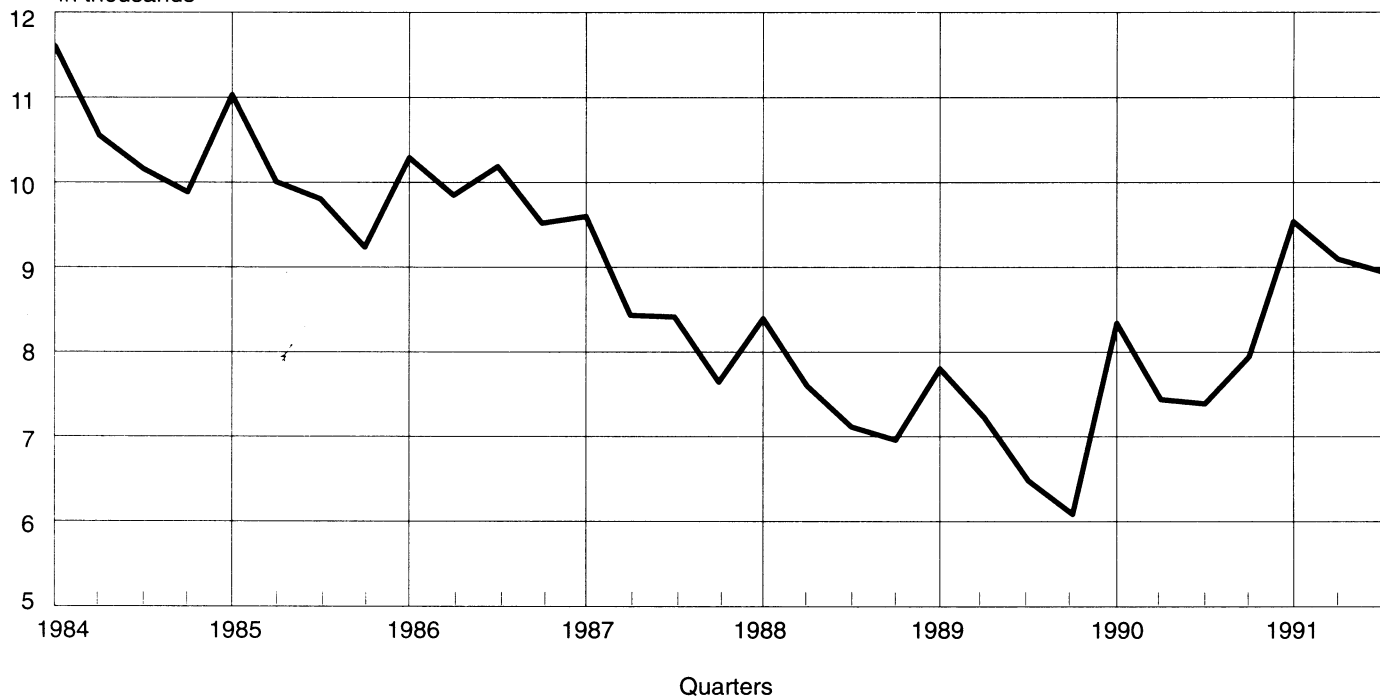
In thousands



Note: Includes some persons who were looking for work, on layoff, or outside the labor force at sometime during the month.

Figure 6.  
**Persons Looking for Work or On Layoff During Month From Combined SIPP Panels:  
 First Quarter 1984 to Third Quarter 1991**

In thousands



Note: Includes some persons who may have had a job or were outside the labor force.

**Table D. Average Monthly Estimates of Persons With a Job and Persons Who Looked for a Job or Were on Layoff At Some Time During the Month— Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In thousands)

Year and quarter	With a job	Looked or on layoff
<b>1984</b>		
1st quarter*	102,228	11,603
2nd quarter*	104,652	10,550
3rd quarter*	105,687	10,157
4th quarter*	105,224	9,882
<b>1985</b>		
1st quarter	105,200	11,029
2nd quarter	107,303	10,004
3rd quarter	108,064	9,801
4th quarter	107,718	9,234
<b>1986</b>		
1st quarter	108,211	10,288
2nd quarter	110,264	9,845
3rd quarter	111,024	10,186
4th quarter	110,539	9,519
<b>1987</b>		
1st quarter	109,564	9,597
2nd quarter	111,899	8,432
3rd quarter	112,892	8,413
4th quarter	112,492	7,642
<b>1988</b>		
1st quarter	112,509	8,393
2nd quarter	114,576	7,596
3rd quarter	115,506	7,113
4th quarter	114,606	6,957
<b>1989</b>		
1st quarter	114,931	7,801
2nd quarter	117,095	7,225
3rd quarter	118,224	6,479
4th quarter*	117,355	6,084
<b>1990</b>		
1st quarter*	116,133	8,340
2nd quarter*	118,079	7,436
3rd quarter*	118,359	7,387
4th quarter*	117,210	7,946
<b>1991</b>		
1st quarter	115,608	9,537
2nd quarter	117,133	9,095
3rd quarter	117,340	8,945

\* Single panel estimates only.

## Program Participation

Along with income measurement, the second key reason for the development of the SIPP was to obtain information on the participation in and eligibility for the wide assortment of government social welfare programs, such as Aid to Families with Dependent Children (AFDC), food stamps, Social Security, and unemployment compensation. As is well known, the Nation's social welfare system is not only a complex assortment of governmental programs that has grown significantly

**Table E. Average Monthly Estimates of Persons With Some Labor Force Activity During the Month and Who Lived in Households in Which Food Stamps Were Received— Combined Panel Estimates: Third Quarters 1984 to 1991**

(In thousands)

Year and quarter	With labor force activity	Job entire month	Job part of month	No job, looked or on layoff
<b>1984*</b>				
3rd quarter	4,813	2,505	366	1,942
<b>1985</b>				
3rd quarter	4,309	2,299	304	1,707
<b>1986</b>				
3rd quarter	4,558	2,455	295	1,807
<b>1987</b>				
3rd quarter	4,075	2,418	252	1,404
<b>1988</b>				
3rd quarter	3,973	2,469	248	1,255
<b>1989</b>				
3rd quarter	3,963	2,658	241	1,064
<b>1990*</b>				
3rd quarter	4,355	2,993	253	1,109
<b>1991</b>				
3rd quarter	5,069	3,336	278	1,454

\* Single panel estimates only.

over the decades, but it is also an important source of income for many American households.

While administrative statistics on the many programs are available, it is difficult to use them for policy and research purposes because of the many differences in each programs' administrative statistical system (i.e., periodicity of receipt, coverage, reporting units). In the SIPP, however, many of these problems can be circumvented since the information is derived through a common mechanism, the household interview.

In the following analysis, we examine program participation on a household basis, that is, whether or not the household (or a member of the household) was a recipient of some governmental benefit. (As will also be shown, it is not uncommon for low income households to be recipients of more than one benefit.)

**Overall participation.** Participation in government income transfer programs is commonplace in our society, just as it is in other developed countries, because of the wide diversity of programs that have been established for their citizens down through the years. These programs range from perhaps the most commonly thought-of program, Social Security, to smaller, less well-known

programs, such as Trade Adjustment Assistance, a program developed to help workers who have lost their jobs because of changes in foreign trade.

One way these programs have been classified is whether they are "means-tested" or not. Means-tested programs are programs that require the income or assets (resources) of the individual, family, or household to be below specified levels in order to qualify for the benefit. These programs can be further divided into "cash" and "noncash" means-tested programs meaning that in the former cash benefits are received while in the latter benefits are in the form of vouchers, stamps, payments for housing or meals, and so on, designed so as to provide some specific benefit. The most commonly discussed benefits of this kind are food stamps, Medicaid, free or reduced school breakfasts and lunches, and public or subsidized housing. Cash means-tested benefits, of course, involve cash payments. Perhaps the two most frequently heard of programs of this type are Aid to Families with Dependent Children (AFDC) and Federal Supplemental Security Income (SSI), both of which are targeted at very specific populations subgroups.<sup>19</sup>

The nonmeans-tested programs, while not requiring any financial test for eligibility, often require a particular condition (i.e., age, illness or disability, unemployment) or other circumstance for eligibility. The major nonmeans-tested programs include Social Security, Medicare, and unemployment compensation.

Many other means and nonmeans-tested programs exist, such as educational assistance programs and the retirement programs of the Federal government and U.S. military. All of them were established to meet some perceived need and SIPP attempts to identify most of them that are received in households (and by persons) and also find out about the nature of the benefit (i.e., its amount and frequency of receipt).<sup>20</sup>

Figure 8 and table F present combined panel estimates of the percentage of all nonfarm households in which one or more benefits from a government program was received by someone in a household. The specific benefit programs used in these estimates are:

<sup>19</sup>While means-tested noncash benefits are obviously a source of income (and resources), a monetary value is not imputed to them by the Census Bureau and therefore not counted as income in SIPP's income estimates. The Census Bureau, however, has been involved in research to value certain noncash benefits and is currently working to extend the methodology to the SIPP. See *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992*, Current Population Reports, Consumer Income, Series P60-186RD U.S. Bureau of the Census, (Washington, DC: USGPO), September 1993.

<sup>20</sup>For an analysis of the SIPP data on program participation see Martina Shea, *Characteristics of Recipients and the Dynamics of Program Participation: 1987-88*, Current Population Reports, Household Economic Studies, P70-31, November 1992.

<sup>21</sup>Educational assistance programs include educational and training services provided through the G.I. Bill, other veterans' Educational Assistance Programs, Pell Grants, Supplemental Educational Opportunity Grants, National Direct Student Loans, Guaranteed Student Loans, Job Training Partnership Act, and Work Study Programs.

Nonmeans-Tested	Means-Tested
Social Security	AFDC/other cash welfare
Railroad Retirement	Supplemental Security Income
Medicare	Food stamps
Unemployment compensation	Free/reduced price school meals
Workers' compensation	Medicaid
Veteran payments	Public/subsidized rental housing
Black Lung benefits	
State temporary sickness or disability benefits	
Foster Child Care	
Educational assistance <sup>21</sup>	

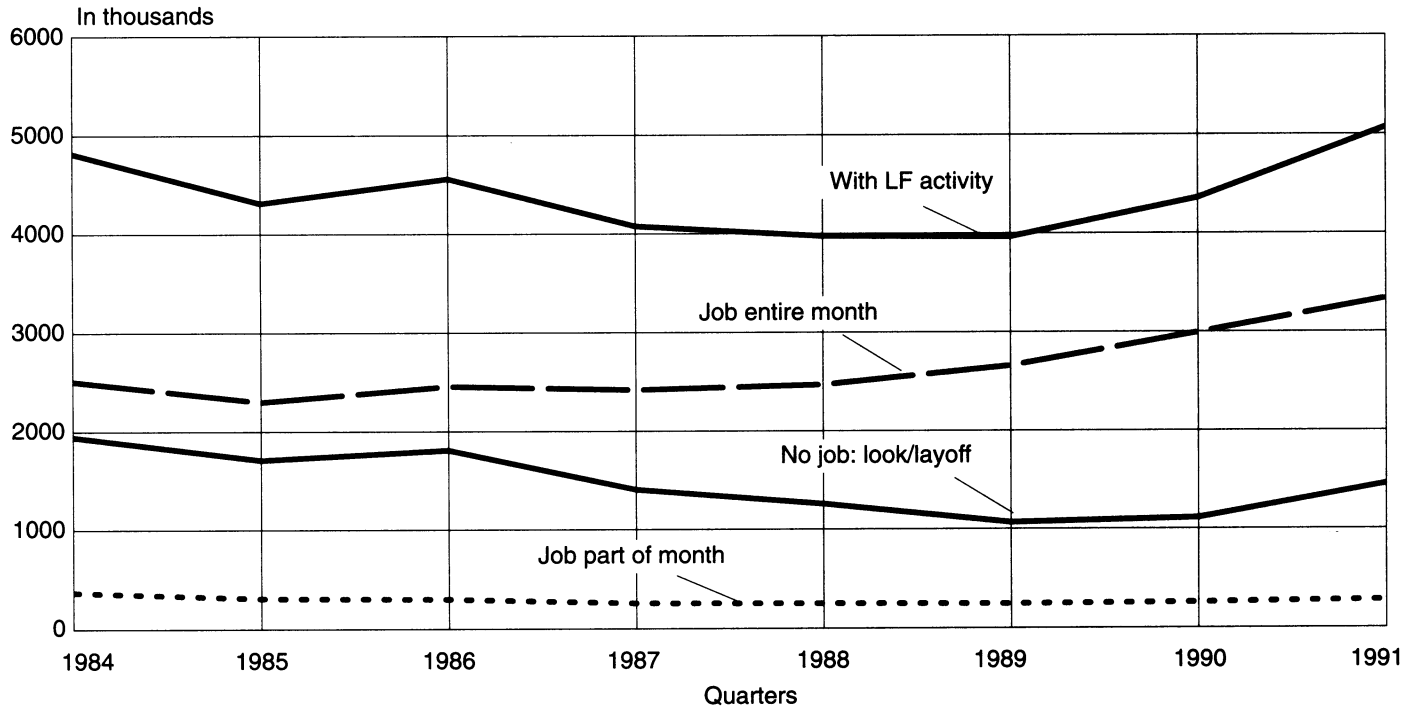
**Table F. Average Monthly Estimates of the Percentage of Households Receiving Government Benefits, Means-Tested Benefits, and Nonmeans-Tested Benefits—Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In percent)

Year and quarter	Government benefits	Means-tested benefits	Nonmeans-tested benefits
<b>1984</b>			
1st quarter*	46.7	19.2	36.6
2nd quarter*	44.9	17.2	35.7
3rd quarter*	43.3	15.6	35.2
4th quarter*	45.1	18.0	35.7
<b>1985</b>			
1st quarter*	46.1	18.1	36.8
2nd quarter*	44.1	16.3	35.6
3rd quarter*	43.1	15.1	35.2
4th quarter*	44.5	17.6	35.1
<b>1986</b>			
1st quarter*	46.7	18.8	36.4
2nd quarter*	46.0	18.4	35.9
3rd quarter*	45.2	17.2	36.0
4th quarter*	46.3	18.7	36.1
<b>1987</b>			
1st quarter	46.4	18.4	36.6
2nd quarter	44.8	17.0	35.7
3rd quarter	44.0	16.1	35.4
4th quarter	45.6	18.1	35.7
<b>1988</b>			
1st quarter	45.8	18.1	36.0
2nd quarter	44.2	16.4	35.3
3rd quarter	43.0	15.2	35.1
4th quarter	45.0	17.7	35.5
<b>1989</b>			
1st quarter	45.4	18.2	35.8
2nd quarter	44.1	16.5	35.6
3rd quarter	43.2	15.2	35.4
4th quarter*	45.7	17.8	35.4
<b>1990</b>			
1st quarter*	46.5	18.2	36.5
2nd quarter*	45.3	16.6	36.2
3rd quarter*	44.7	15.5	36.3
4th quarter*	47.1	18.5	36.7
<b>1991</b>			
1st quarter	47.7	19.3	37.1
2nd quarter	46.4	17.8	36.7
3rd quarter	45.6	16.6	36.7

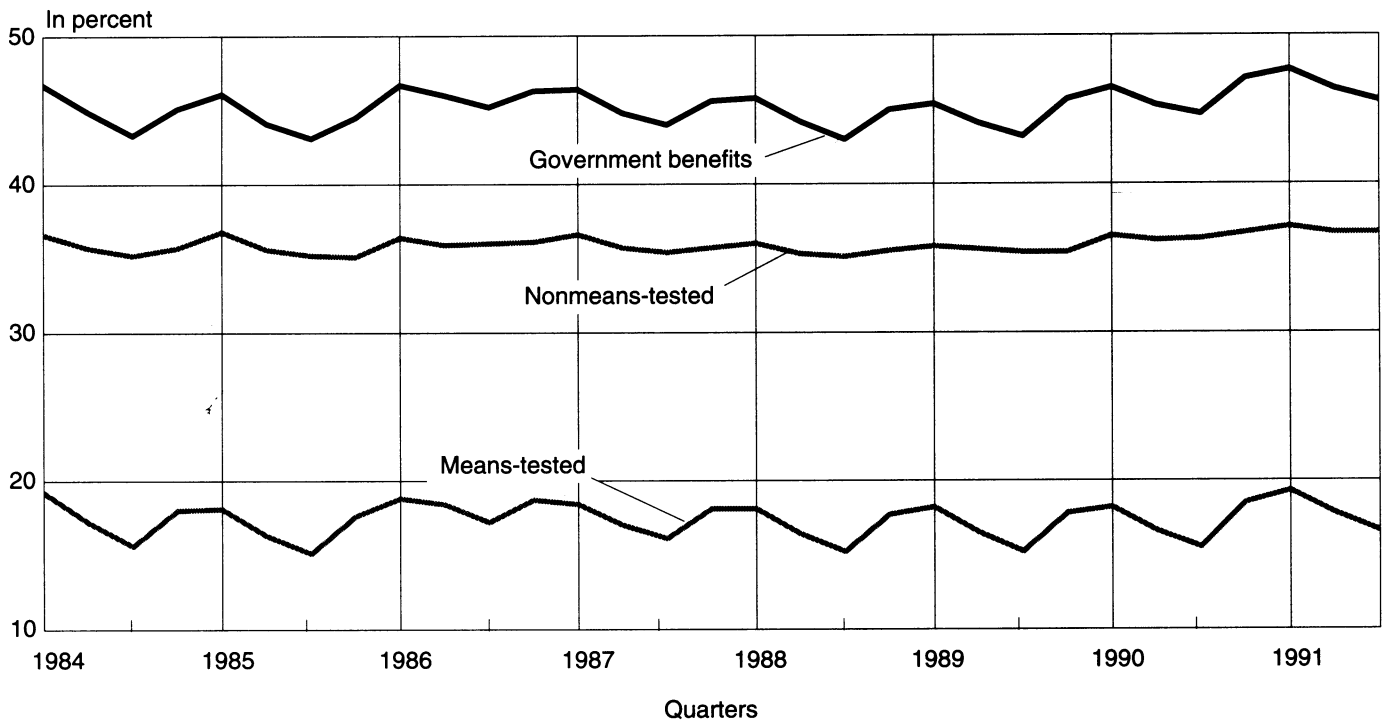
\* Single panel estimates only.

Figure 7.  
Persons With Labor Force Activity Living in Households in Which Food Stamps  
Were Received: Third Quarters 1984 to 1991



Note: Estimates are for the third quarter of each year only.

Figure 8.  
Percent of Households Receiving Government Benefits: First Quarter  
1984 to Third Quarter 1991



Note: The sum of those receiving nonmeans-tested and means-tested benefits exceeds the total because many households receive both.

As shown in the figure 8 and table F, during most of the period under investigation the number of households with at least one person participating in a means-tested or nonmeans-tested program varied between 43.0 and 47.7 percent of all nonfarm households in the country (these two estimates were significantly different from one another).

Also shown are the percentages of households in which at least one person received a means-tested benefit and households in which at least one person received a nonmeans-tested benefit.<sup>22</sup> The percentage of households in receipt of means-tested benefits ranged between 15.1 and 19.3 percent, while those in receipt of nonmeans-tested benefits ranged between 35.1 and 37.1 percent of all households. (The differences in the proportions receiving means-tested and nonmeans-tested benefits were statistically significant.)

These estimates do not appear to be very responsive to cyclical changes in the economy, even though some of the specific programs are, such as the receipt of unemployment compensation. It should be remembered that many of the programs are targeted at very specific sub-groups in the population (which may be immune to swings in the business cycle) and are also subject to changes in eligibility requirements, coverage, and so on due to legislative and/or administrative changes. The SIPP estimates of means-tested benefits appear to have a seasonal pattern—insofar as the first-quarter estimate is much higher than the third quarter estimate in each year—which no doubt is caused by households with school age children in them that receive free or reduced price school meals.<sup>23</sup>

**Individual program participation.** Figures 9, 10, and table G present combined panel estimates for participation in specific government social welfare programs. Figure 9 displays the estimated number of households with at least one member receiving unemployment compensation under the Federal-State unemployment insurance program as established under the Social Security Act, as well as those members who may have received benefits as former State and local government employees, Federal civilian employees, and veterans.

Clearly, the estimates display a seasonal as well as a cyclical pattern between the first quarter of 1984 (a single panel estimate) and third quarter of 1991. Between

the first quarter of 1985 and third quarter of 1985 the number of households with someone receiving unemployment compensation fell from 2.9 million to 1.8 million and substantial declines are observed in other years over the same time period. The cyclical increases in this series can be observed by examining the levels in the third quarters of 1988, 1989, 1990, and 1991. There was virtually no change in the estimates between the third quarters of 1988 and 1989, but between the third quarters of 1989 and 1991 the number of households with someone receiving unemployment compensation rose from 1.4 million to 2.7 million, no doubt the result of the 1990-91 recession.<sup>24</sup>

Figure 10 shows the monthly average estimates for households in which benefits from four specific noncash means-tested programs were received: free or reduced price school meals, food stamps, Medicaid, and public or subsidized housing. As was mentioned earlier, estimates of households with at least one child receiving a free or reduced price school meal has a definite seasonal pattern. On the other hand, increases in food stamp and Medicaid participation between the third quarters of 1989 and 1991 appeared to be related to the recession.

**Multiple program participation.** Many households, and especially those at the lower end of the income distribution, receive more than one government benefit and the SIPP provides information on these households. One of the more common types of households to participate in more than one program are those receiving AFDC payments, which is a means-tested cash benefit. States must provide Medicaid to families receiving cash assistance under AFDC, for example, and many of these families are also eligible for food stamps.<sup>25</sup>

Table H shows that in the third quarter of 1991, 4.1 million households received AFDC or other public cash assistance and 3.7 million of them also were in receipt of benefits from at least two or more means-tested noncash programs. In addition to AFDC payments, 1.3 million also received food stamps and Medicaid, while another 613,000 households received food stamps, Medicaid, and public or subsidized housing.

Figure 11 shows the trend in the number of AFDC households who received benefits from two or more noncash programs over the 1984 to 1991 periods using the combined panel estimates for the third quarter of each year (the 1984 and 1990 estimates are from single panels). Clearly, there was a significant increase between the third quarters of 1989 and 1991 in the number of AFDC households also receiving benefits from two or

<sup>22</sup>Obviously, a household may have members receiving combinations of means-tested and nonmeans-tested benefits and this is why the same household may be in both universes and the sum of the two exceeds the total number of households receiving government benefits. The percentage of households receiving government benefits is much larger than the percentage of all "persons" receiving benefits because only one person in a multiperson household has to be receiving a benefit for a household to be included in the household percentage.

<sup>23</sup>The proportion of households receiving means-tested benefits between the first quarter of 1984 and third quarter of 1984, for example, went from 19.2 to 15.6 percent, a statistically significant decline. Changes between these quarters in other years were also statistically significant.

<sup>24</sup>In terms of the estimates of *persons* receiving unemployment compensation, the SIPP has been shown to underreport reciprocity to some extent (see *SIPP Quality Profile*, pp. 123-124).

<sup>25</sup>See *Overview of Entitlement Programs: 1993 Green Book*, Committee on Ways and Means, U.S. House of Representatives (Washington, DC: USGPO), July 7, 1993, pp. 645-646.

**Table G. Average Monthly Estimates of Households Receiving Selected Government Benefits—  
Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In thousands)

Year and quarter	Unemployment compensation	School meals	Food stamps	Medicaid	Public or subsidized housing
<b>1984</b>					
1st quarter*	2,659	5,896	6,462	7,593	3,615
2nd quarter*	2,047	3,689	6,303	7,559	3,669
3rd quarter*	1,784	1,859	5,989	7,242	3,670
4th quarter*	2,240	5,653	6,107	7,211	3,584
<b>1985</b>					
1st quarter	2,913	*5,553	6,130	7,379	3,635
2nd quarter	2,136	*3,499	5,891	7,349	3,613
3rd quarter	1,812	*1,889	5,772	7,427	3,650
4th quarter	1,933	*5,739	5,768	7,485	3,716
<b>1986</b>					
1st quarter	2,532	*6,278	6,186	7,591	4,017
2nd quarter	2,058	(NA)	6,061	7,674	4,092
3rd quarter	2,049	(NA)	5,870	7,685	4,022
4th quarter	2,098	*6,484	5,921	7,803	3,950
<b>1987</b>					
1st quarter	2,483	6,182	6,286	7,992	4,030
2nd quarter	1,793	3,971	6,181	8,041	4,081
3rd quarter	1,531	*2,057	5,891	8,029	4,036
4th quarter	1,873	6,183	5,811	8,007	4,053
<b>1988</b>					
1st quarter	2,079	6,365	5,956	7,901	4,269
2nd quarter	1,551	4,077	5,886	8,124	4,279
3rd quarter	1,443	2,115	5,778	8,217	4,256
4th quarter	1,517	6,422	5,925	8,213	4,285
<b>1989</b>					
1st quarter	1,999	6,758	5,963	8,257	4,662
2nd quarter	1,597	4,379	5,810	8,232	4,641
3rd quarter	1,426	2,285	5,750	8,378	4,500
4th quarter*	1,382	6,774	6,108	8,730	4,252
<b>1990</b>					
1st quarter*	2,407	6,841	5,939	8,348	4,576
2nd quarter*	2,011	4,497	6,184	8,607	4,470
3rd quarter*	1,921	2,375	6,254	8,871	4,452
4th quarter*	2,288	7,244	6,334	9,014	4,431
<b>1991</b>					
1st quarter	3,263	7,548	6,702	9,452	4,631
2nd quarter	2,835	4,886	6,773	9,669	4,627
3rd quarter	2,694	2,579	6,837	10,031	4,636

NA Not available. \* Single panel estimates only.

Figure 9.  
Households in Which Unemployment Insurance Benefits Were Received:  
First Quarter 1984 to Third Quarter 1991

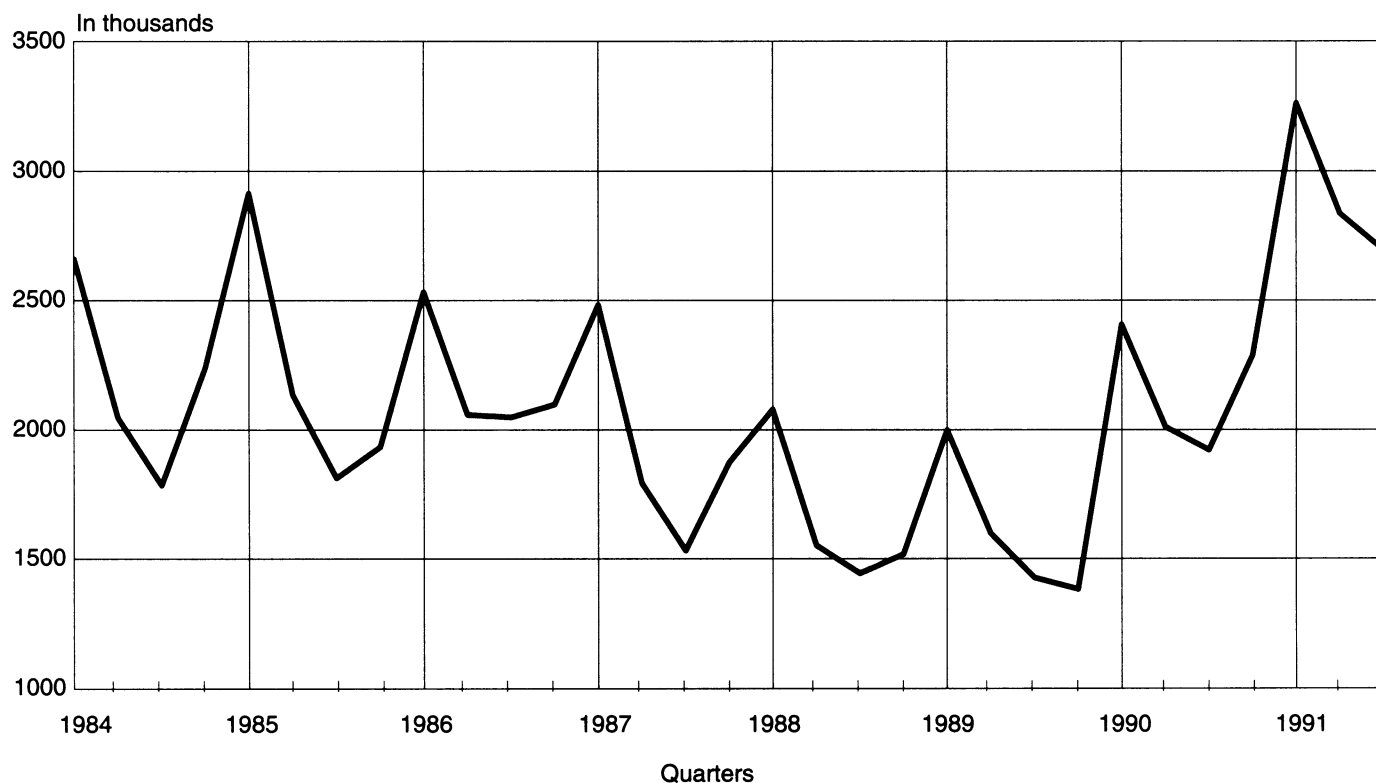


Figure 10.  
Households in Which Selected Noncash Means-Tested Benefits Were Received:  
First Quarter 1984 to Third Quarter 1991

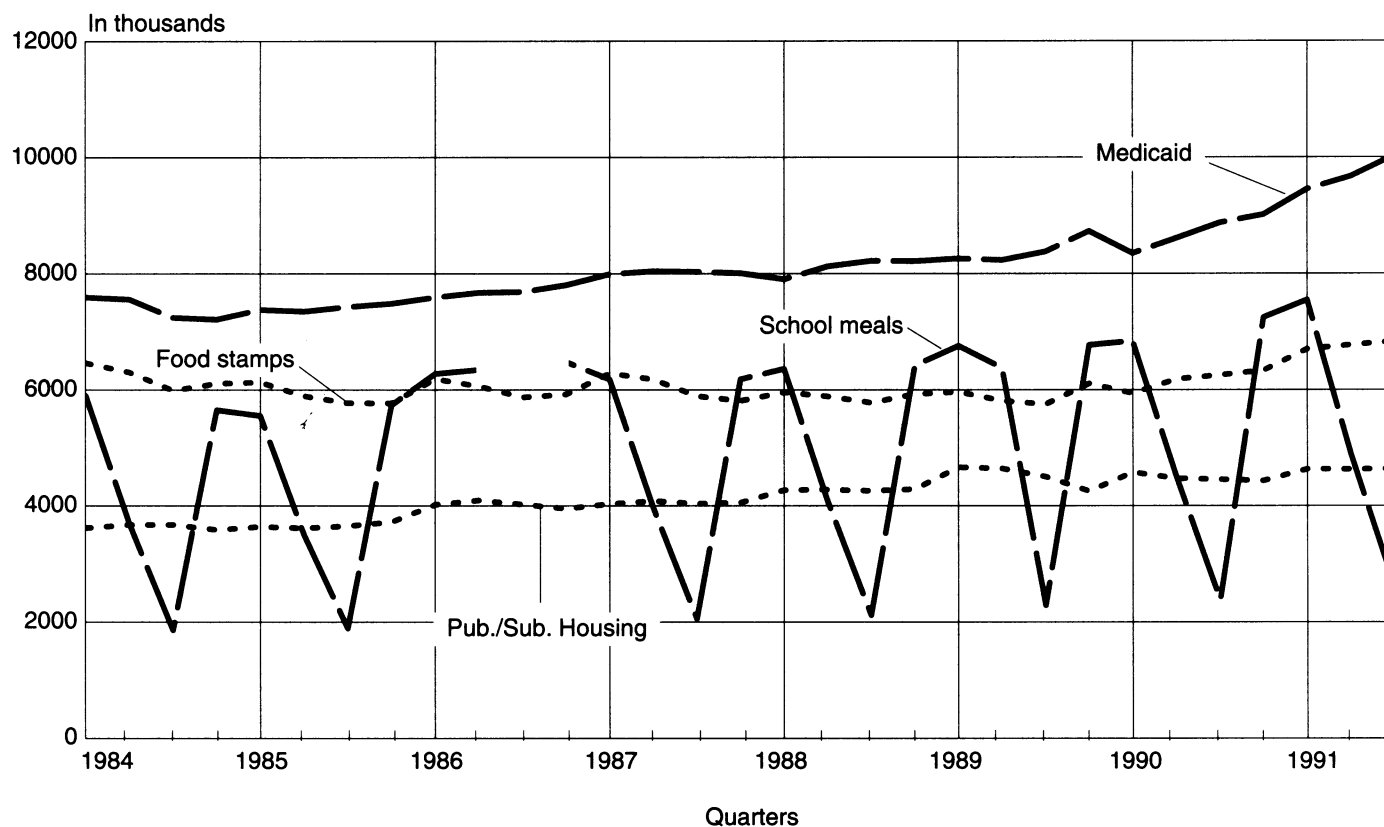
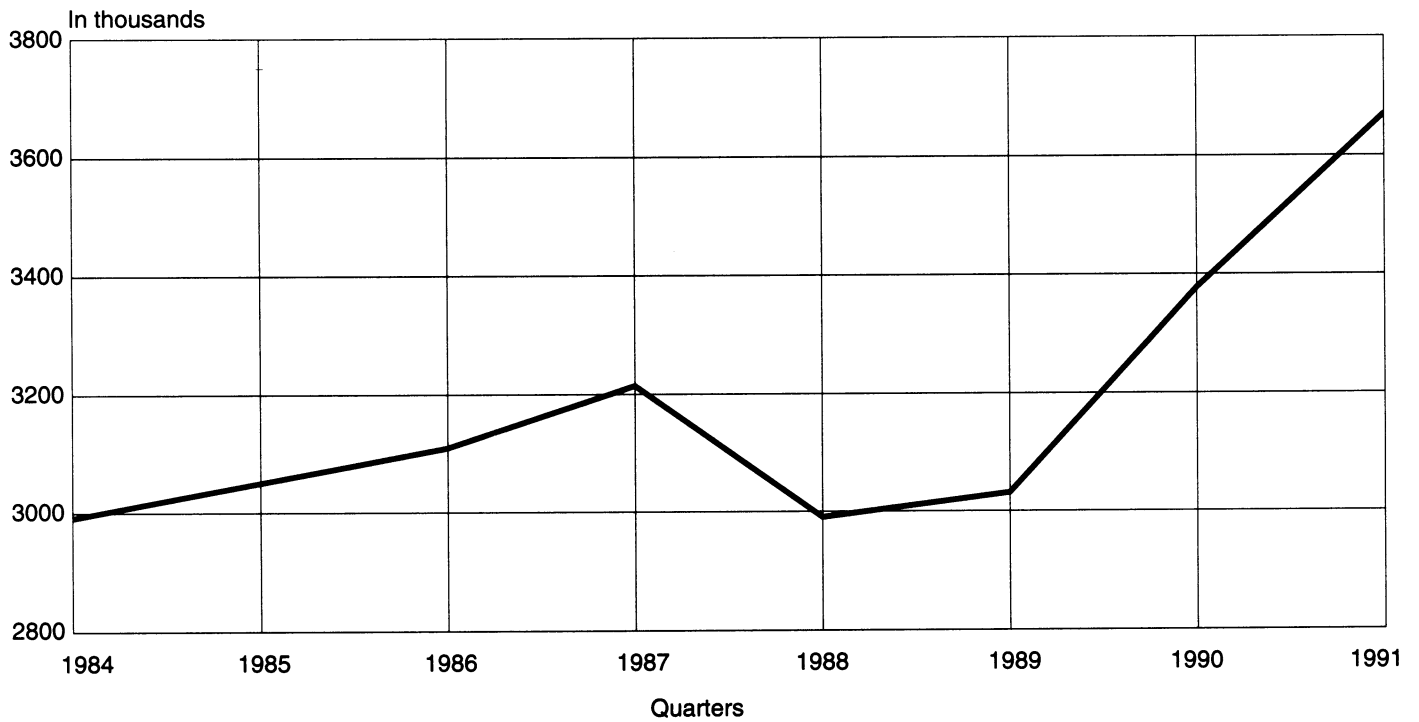
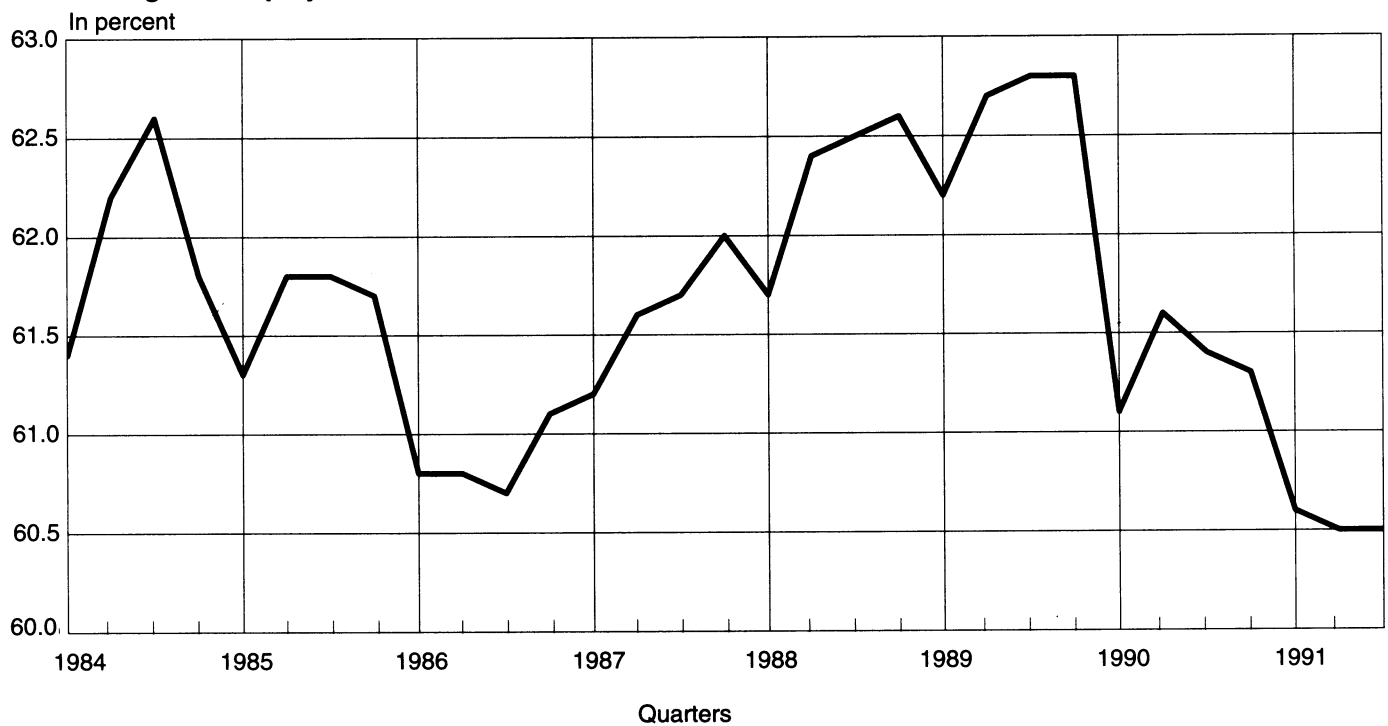


Figure 11.  
**AFDC Households Which Received Two or More Means-Tested  
 Noncash Benefits: Third Quarters 1984 to 1991**



Note: The means-tested noncash benefits often received in addition to AFDC are Medicaid, food stamps, schools meals, and public or subsidized housing.

Figure 12.  
**Percent of All Persons Who Had Health Insurance Coverage Provided  
 Through an Employer: First Quarter 1984 to Third Quarter 1991**



**Table H. Average Monthly Estimates of Households Receiving AFDC or Other Public Assistance and Those Also Receiving Means-Tested Noncash Benefits—Combined Panel Estimates: Third Quarter 1991**

(In thousands)

Reciprocity status	Households
Total receiving AFDC .....	4,099
Received means-tested noncash benefits also ..	4,037
Received only one .....	368
Received two .....	1,449
Food stamps and Medicaid .....	1,285
Received three .....	1,445
Food stamps, Medicaid, public or subsidized housing .....	613
Received four .....	776
Did not receive means-tested noncash benefits ..	62

more means-tested noncash programs (from 3.0 million to 3.7 million). This development may well have been associated with the downturn in economic activity in the 1990-91 period.

## Health Insurance

One of the more topical public policy issues in recent years has been health insurance reform and the Census Bureau periodically produces reports on health insurance coverage based on data collected in the SIPP.<sup>26</sup> Indeed, the SIPP data has been used in the debate over health care reform.<sup>27</sup>

Table I shows the health insurance coverage status of all persons in the country as of the third quarters of 1984 (a single panel estimate), 1989, and 1991. According to SIPP, as of the average month in the third quarter of 1991, 32.5 million persons, or 13.0 percent of the population had no health insurance coverage. Compared to the CPS, which presumably relates to coverage at any time during the year, 35.4 million persons had no health insurance coverage, or 14.1 percent of the population.<sup>28</sup>

As is also shown in the table, most Americans obtain their health insurance coverage through an employer. In

**Table I. Average Monthly Estimates of Persons Health Insurance Status—Combined Panel Estimates: Third Quarter 1984, 1989, and 1991**

(In thousands)

Status	3rd quarter 1991	3rd quarter 1989	3rd quarter 1984*
Total persons .....	250,104	244,967	232,871
Covered:			
Private or government health insurance .....	217,573	214,192	201,649
Private health insurance ....	188,717	189,325	177,061
Related to employment ...	151,424	153,935	144,320
Medicare .....	32,606	31,493	28,426
Medicaid .....	22,348	17,811	17,101
Not covered .....	32,529	30,775	31,222

\* Single panel estimate only.

the third quarter of 1991, 60.5 percent of the population obtained health insurance coverage in this manner. Significant proportions of the population, in particular the elderly and persons with low incomes, obtain their health insurance through the government, specifically through Medicare and Medicaid. Approximately 13.0 percent of the population were covered by Medicare and 8.9 percent by Medicaid.<sup>29</sup>

Table J and figures 12 and 13 show there have been some changes in status over time as well. The proportion of all persons having health insurance coverage through their employment (past or present) or someone else's declined from 62.8 percent in third quarter of 1989 to 60.5 percent in the third quarter of 1991. This can be seen graphically in figure 12. The loss of jobs associated with the 1990-91 recession had an obvious impact on health insurance coverage.

At the same time, health insurance coverage under Medicaid increased rather dramatically. In the third quarter of 1989 Medicaid coverage accounted for 7.3 percent of the population, but 2 years later this proportion had risen to almost 9.0 percent, as is shown in figure 13. Quite likely this resulted from the increase in the number of needy unemployed parents with children.<sup>30</sup>

Figure 14 shows the trend in health insurance "non-coverage" as manifested in the average monthly

<sup>26</sup>See Kathleen Short, *Health Insurance Coverage: 1987-1990*, Current Population Reports, Household Economic Studies, Series P70, No. 29. Short cautions users of the health insurance data to possible attrition and time-in-sample biases.

<sup>27</sup>See Spencer Rich, "Who Are the Uninsured?" *The Washington Post* (Health Section), September 21, 1993, pp. 10-11.

<sup>28</sup>It has been argued that there is a tendency for CPS respondents to answer health insurance questions based on their current situation and not their situation in the previous calendar year and that is why the CPS and SIPP estimates are so similar. See Katherine Swartz, "How Different are Four Surveys' Estimates of the Number of Americans Without Health Insurance?" Project Report, Urban Institute, 1984.

<sup>29</sup>A small proportion of these persons who are both poor and aged are covered by both Medicaid and Medicare.

<sup>30</sup>The changes in coverage from employers and from Medicaid are similar to the changes observed in the CPS in the 1989-91 period. See *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1990*, Current Population Reports, Consumer Income, Series P-60, No. 176-RD, August, 1991, p. 9, and *Money Income of Households, Families, and Persons in the United States: 1991*, Current Population Reports, Consumer Income, Series P-60, No. 180, August 1992, p. xx.

Figure 13.  
Percent of All Persons Who Had Health Insurance Coverage Through Medicaid:  
First Quarter 1984 to Third Quarter 1991

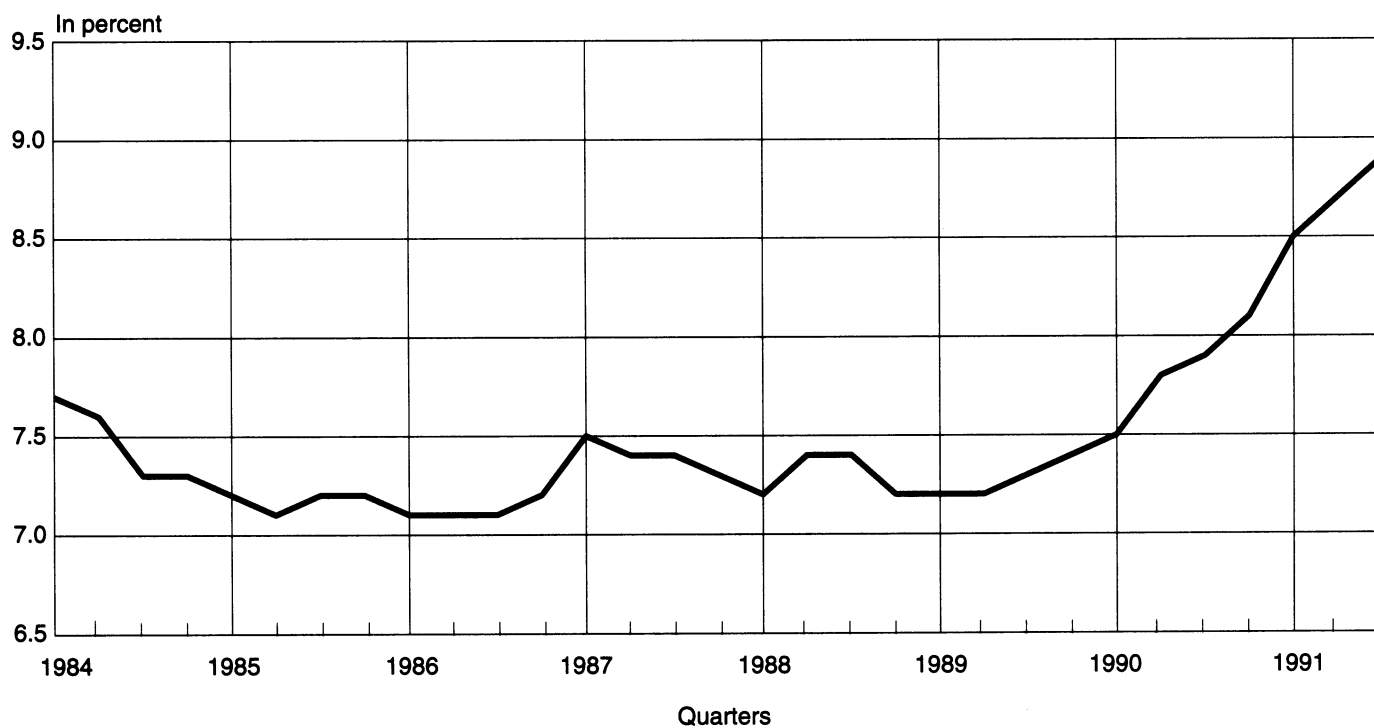
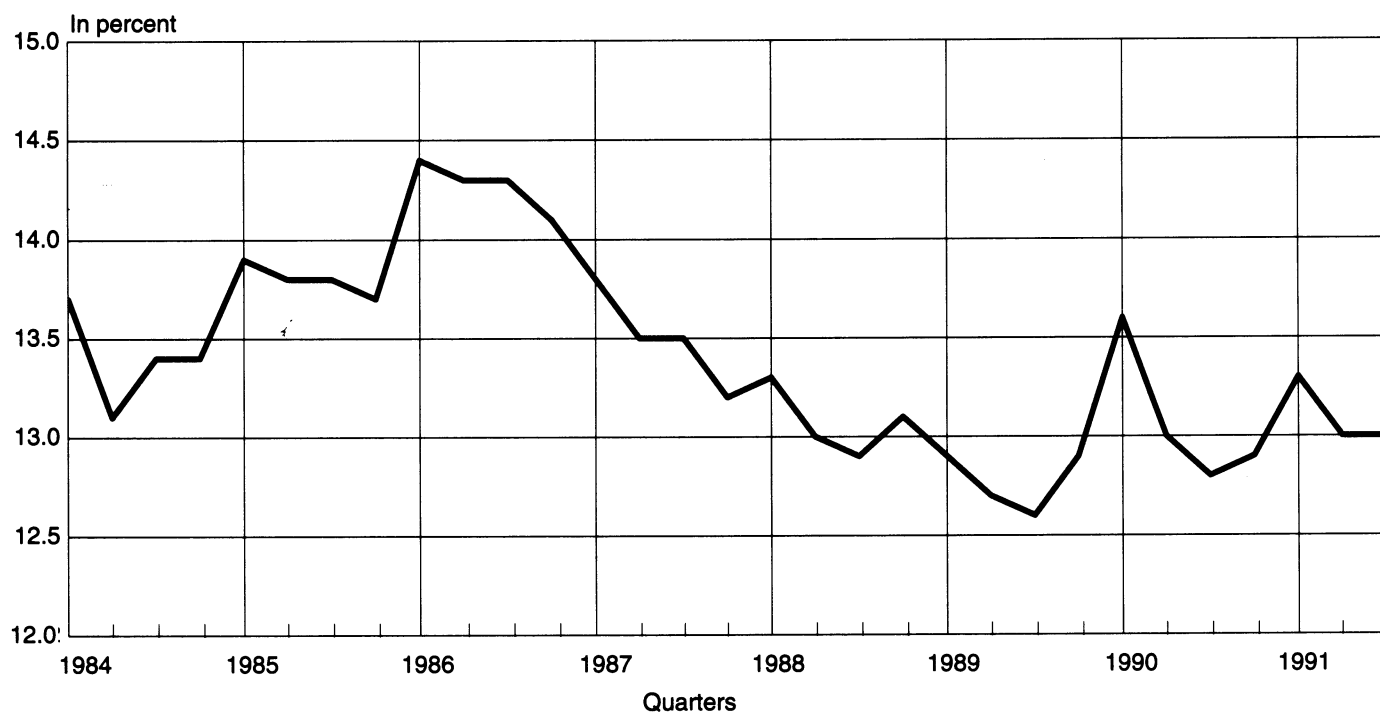


Figure 14.  
Percent of All Persons With No Health Insurance Coverage:  
First Quarter 1984 to Third Quarter 1991



**Table J. Average Monthly Estimates of the Percentage of Persons Without Health Insurance Coverage and With Coverage Provided by an Employer or by Medicaid—Combined Panel Estimates: First Quarter 1984 to Third Quarter 1991**

(In percent)

Year and quarter	No coverage	Employer provided	Medicaid
<b>1984</b>			
1st quarter*	13.7	61.4	7.7
2nd quarter*	13.1	62.2	7.6
3rd quarter*	13.4	62.6	7.3
4th quarter*	13.4	61.8	7.3
<b>1985</b>			
1st quarter	13.9	61.3	7.2
2nd quarter	13.8	61.8	7.1
3rd quarter	13.8	61.8	7.2
4th quarter	13.7	61.7	7.2
<b>1986</b>			
1st quarter	14.4	60.8	7.1
2nd quarter	14.3	60.8	7.1
3rd quarter	14.3	60.7	7.1
4th quarter	14.1	61.1	7.2
<b>1987</b>			
1st quarter	13.8	61.2	7.5
2nd quarter	13.5	61.6	7.4
3rd quarter	13.5	61.7	7.4
4th quarter	13.2	62.0	7.3
<b>1988</b>			
1st quarter	13.3	61.7	7.2
2nd quarter	13.0	62.4	7.4
3rd quarter	12.9	62.5	7.4
4th quarter	13.1	62.6	7.2
<b>1989</b>			
1st quarter	12.9	62.2	7.2
2nd quarter	12.7	62.7	7.2
3rd quarter	12.6	62.8	7.3
4th quarter*	12.9	62.8	7.4
<b>1990</b>			
1st quarter*	13.6	61.1	7.5
2nd quarter*	13.0	61.6	7.8
3rd quarter*	12.8	61.4	7.9
4th quarter*	12.9	61.3	8.1
<b>1991</b>			
1st quarter	13.3	60.6	8.5
2nd quarter	13.0	60.5	8.7
3rd quarter	13.0	60.5	8.9

\* Single panel estimates only.

estimates for calendar year quarters between the first quarter of 1984 (a single panel estimate) and third quarter of 1991. Between the third quarter of 1986 and third quarter of 1989 the proportion of the population not

covered by health insurance dropped from 14.3 percent to 12.6 percent. Thereafter, the improvement came to an end.<sup>31</sup>

### Technical Note: Cross-Sectional Estimates from a Panel Survey

The SIPP is one of the most complex continuous household surveys that has ever been conducted. It is complex because the basic survey design enables data users to work with the data either longitudinally or cross-sectionally. Users of the SIPP's cross-sectional data should be aware of some of the more important implications for data quality that flow from this capability.

One of the implications for the estimates is the effect of attrition bias. While attrition in panel surveys is anticipated and dealt with via noninterview weighting adjustments, there is evidence that, although attrition patterns in SIPP are similar to those of other panels, current adjustment procedures do not fully compensate for it.<sup>32</sup> This is particularly problematic for low income households, such as those found among minorities, movers, and renters, groups for which the SIPP was to provide data. Figure 15 presents the panel estimates of households with low monthly incomes and it shows how in each panel the first estimate of the panel is higher than the second. Whether or not these changes are related to attrition bias (or possibly seasonality or a combination of the two) is a matter for further research.

Another implication for the data involves time-in-sample effects, or the tendency for some household respondents to alter their reporting of information with successive interviews. This can also be troublesome in panel surveys. Research in this area on the SIPP panels has been mixed but the Committee on National Statistics (established for the purposes of evaluating the SIPP) concluded that the effects are limited.<sup>33</sup>

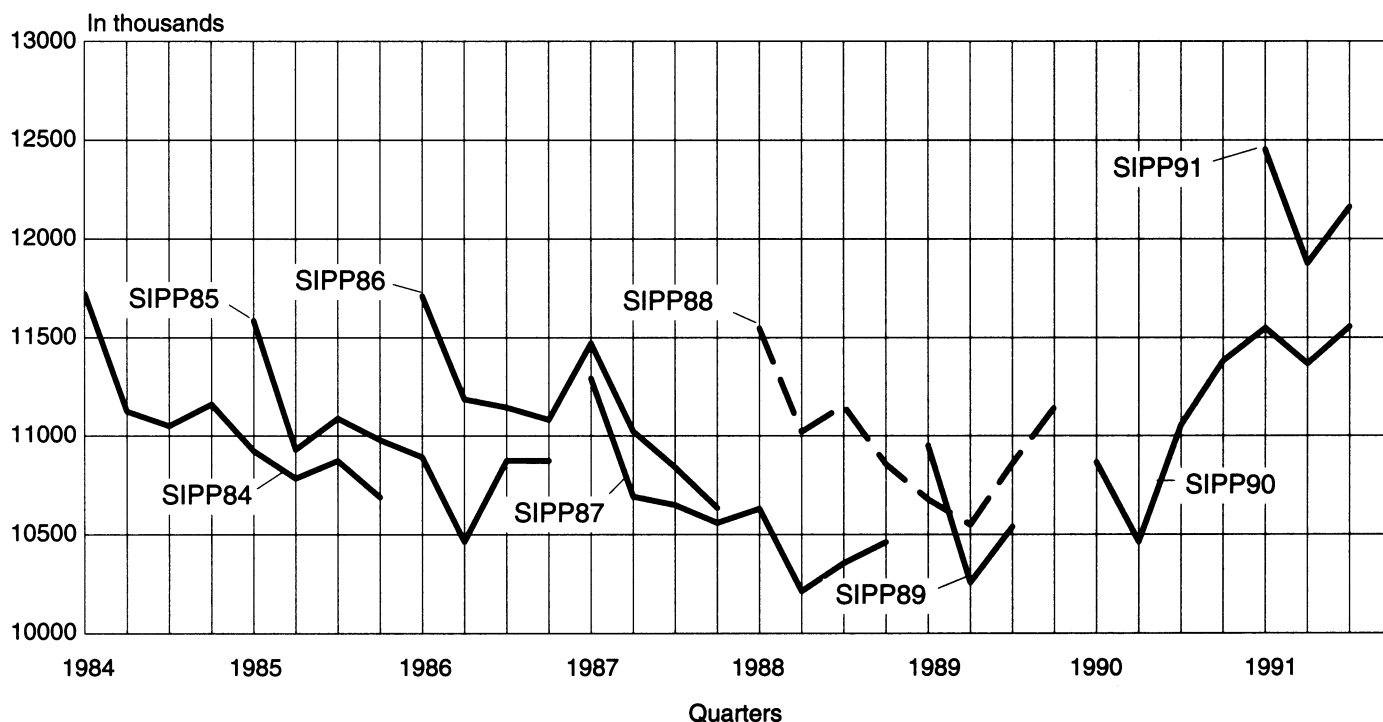
Any monthly estimate from any one SIPP panel is obtained from pooling the data from four sample rotation groups, each using a different recall period—1 month, 2 months, 3 months, and 4 months. Problems of respondent recall can occur whenever respondents are asked to remember such things as events, behavior, income amounts, etc., received at some distant point in the past. Among the many factors involved with recall are such things as the saliency of the event or behavior

<sup>31</sup>The trend in the noncoverage rate according to CPS data over this period was somewhat different. Between 1987 and 1989 the proportion of the population not covered rose from 12.9 to 13.6 percent. By 1991 it had moved up to 14.1 percent.

<sup>32</sup>Attrition is greatest in the early waves of SIPP panels and then levels off at slightly above 20 percent of the original sample.

<sup>33</sup>See *The Future of the Survey of Income and Program Participation*, National Research Council, (Washington, DC: National Academy Press), 1993, p. 107.

Figure 15.  
Households With Low Monthly Incomes, From SIPP Panels:  
First Quarter 1984 to Third Quarter 1991



and the "task" difficulty in remembering. While some researchers have demonstrated that there is very little recall bias in labor force estimates, others have found evidence of it in the earnings reported by respondents.<sup>34</sup>

<sup>34</sup>See Alberto Martini, "Seam Effect, Recall Bias, and the Estimation of Labor Force Transition Rates From SIPP," *1989 Proceedings of the Annual Meeting of the American Statistical Association: Section on Survey Research Methods*, (Alexandria, VA: American Statistical Association), pp. 387-392, and Daniel Hill, "An Additive Model of Recall Error: Analysis of SIPP Data," *1986 Proceedings of the Annual Meeting of the American Statistical Association: Section on Survey Research Methods*, (Washington, DC: American Statistical Association), pp. 226-230.

Related to the issue of recall in SIPP is the "seam" problem. In the SIPP, there is a 4-month reference period for most of the data items collected and there has been a tendency for a greater amount of change to take place between the ending and beginning months of reference periods than within individual reference periods. While this problem is not thought to be too severe for cross-sectional estimates because of the survey's design, its impact on longitudinal data is less clear.<sup>35</sup>

<sup>35</sup>See *SIPP Quality Profile*, p. 60.